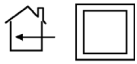
GardTec
RISCO GROUP

GardTec 350+
Control Panel

Installation Instructions

IMPORTANT!

Input:	**AC230V +/-10% ~50Hz 125mA Max. 35W Max**
Nominal Temp Range:	**0 - 50°C**
	**Plastic For Indoor Use Only**

This equipment is intended only for use as a Security Alarm Control Panel. Adequate ventilation away from heat and humidity must be provided. The unit must be fixed securely to a non-flammable surface using suitable fixings.

All mains wiring must be to BS7671 (1992) IEEE wiring regulations (or appropriate international regulatory standards). See Mains Supply Connection section within this manual for more detailed instructions.

All wiring must be protected from sharp or jagged edges.

All Low voltage (alarm) wiring must be to the appropriate international regulatory standards and comply to good wiring practice.
Replacement fuses should be of the same type and rating conforming to IEC 127.

The maximum current draw from the unit for all output combinations **must not exceed 1Amp (350+ only)**. **800mA 350 Control Panel**.

The unit is intended for use with a suitable re-chargeable lead acid battery permanently connected to the appropriate terminals.

All documentation and manuals must be thoroughly read by suitably qualified installation personnel prior to installation.

The unit has no user serviceable parts inside. Internal access should only be by suitably qualified personnel.

Mains Earth

Provision is provided for an earth connection within the mains input connector block, this connection is for protection of the wiring only and is not functional for the unit.

Battery Fuse

An in-line Battery Fuse has now been incorporated into this product. The fuse rating is 2 Amp Anti-Surge. The fuse holder is spring loaded, therefore you should ensure that the battery lead is not under tension in order to maintain a good connection between the fuse and the holder.To change the fuse, push the two halves of the holder together and twist anti-clockwise. Please ensure correct battery charge on completion of the installation and during each service visit.

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INTRODUCTION

The Gardtec 350 is a five zone microprocessor based Control panel. Each of these zones is fully programmable.
The unit may be mounted either vertically or horizontally to enhance it's flexibility. Three part set suites are available, zones programmed as part set zones will be removed when the appropriate part set is selected. The power supply rating of the Gardtec 350 is 1Amp, enough to cope with the average domestic or small commercial installations. The compact size coupled with the range and variety of functions make it an ideal choice for the domestic/ small commercial, bells only system. Factory codes are 1234 for engineer and 5678 for user.

KEYPAD DESCRIPTION

The keypad takes the form of a 4 x 3 (0-9 YES NO) matrix. The orientation of the key numbers will depend on the Gardtec 350 being mounted vertically or horizontally. The unit is supplied with the horizontal label fitted and the vertical label is available separately. **If you wish to change the orientation of the panel fit the vertical keypad overlay. A delay will occur when the panel is powered up. Press 00 for the keypad you have chosen during this power up delay. The orientation of the keys is now correct for your chosen keypad.**

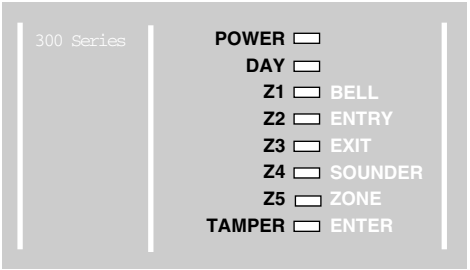
Pressing 4, 6, YES, NO during the power up delay will revert the unit back to factory defaults. NOTE: this will not affect the keypad orientation.

LED FUNCTIONS

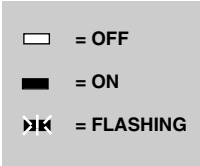
The display is via eight LEDs. There are three modes of LED operation, two user and one engineer mode. The two user modes for the LEDs are shown on the keypad overlays. During primary (setting, unsetting etc) operation the functions shown in Black are used. During secondary (user programming) mode the functions shown in White are used.

When engineer programming mode is being used please use the keypad overlay shown below:-

Use this display layout when in engineer programming mode



Throughout this manual reference to the display will be accompanied by a diagram showing the status of the LEDs. Three modes are possible from each LED and will be shown as follow:-



PROGRAMMING MODES

Two programming modes are available to the engineer: Engineer programming and Engineer/ User programming.

To enter **Engineer Programming Mode** with the panel unset enter engineer code and press YES. The following options may then be programmed:-

BELL OPTION (BELL TIME and number of RE-ARMS)

ENTRY OPTION (ENTRY TIME 1 and ENTRY TIME 2)

EXIT OPTION (FULL SET EXIT TIME and PART SET EXIT TIME)

SOUNDER OPTION (ENTRY/EXIT LEVEL, CHIME LEVEL, SILENT PART SET and PROGRAMMABLE OUTPUT MODE).

ZONE OPTION (ZONE NUMBER, ZONE TYPE, PART SET STATUS and CHIME STATUS)

To enter **Engineer/User Programming Mode** with the panel unset enter the engineer code and press YES. The following options may then be programmed:-

REMOVE OPTION (Allows individual Zones to be Removed)

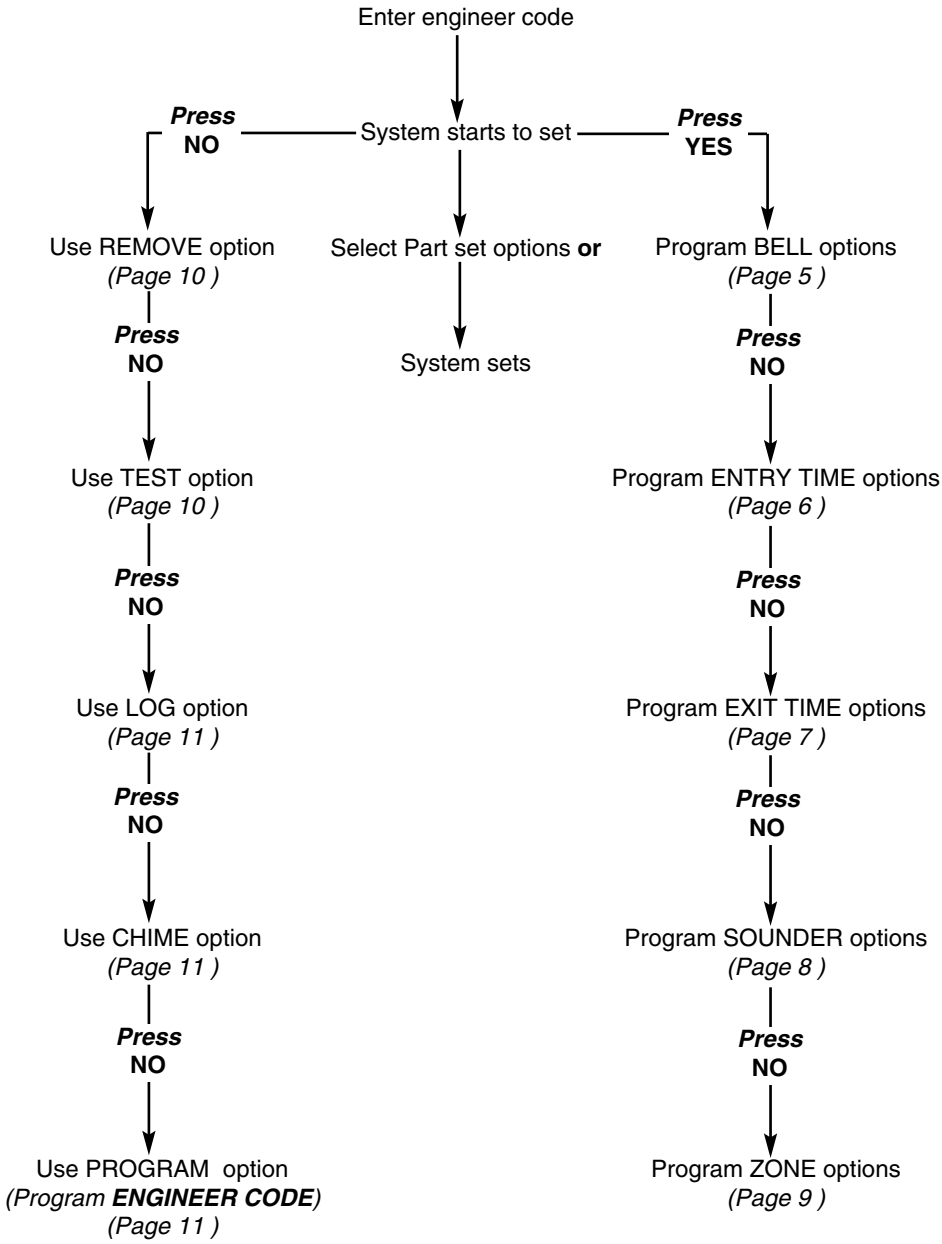
TEST OPTION (Allows the System to be Tested)

LOG OPTION (Allows the Log to be Read)

CHIME OPTION (Allows the Chime option to be turned On and Off globally)

PROGRAM (ENGINEER CODE) OPTION (Change Engineer Code)
The same options in Engineer/User Programming Mode are available in the User programming Mode with the amendment that USER CODES are programmed.

The options available from the two engineer modes are illustrated below.



ENGINEER PROGRAMMING

Engineer programming general routine:

The general programming routine is as follows:-

Enter the Engineer Code. 1234 factory default (Panel will start to set).

Press YES (Before entry time expires) the POWER AND Z1 LEDs will now flash. This is Engineer mode. From this point on the display layout on page 1 (or the engineer programming card) is used.

Press NO until the LED for the option you wish to program is flashing.

Press YES (the LED for that option will now illuminate steadily and the Enter LED will flash).

Enter an appropriate four digit number.

Press YES. (An audible tone will be heard if option is updated).

Use the NO key to move onto other option(s) **or** the 0 key to quit Engineer Programming mode.

A more detailed method for each option now follows

SYSTEM PROGRAMMING

With the control panel unset Enter the Engineer Code. 1234 factory default (Panel will start to set).

Press YES before entry time expires. (Exit sounder will silence). The display layout shown on page 1 (or the engineer programming card) is used whilst in this mode.

The POWER LED will be flashing. (This shows you are in engineer mode).

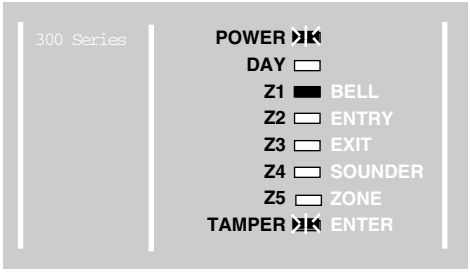
The BELL LED will also be flashing. (This is asking do you want to program this function).

If at any time during the Exit time the code is re-entered the panel will return to DAY (Unset) mode.

SYSTEM PROGRAMMING (BELL OPTION)

With the Control Panel in engineer mode PRESS NO until the POWER & BELL LEDs are FLASHING.

PRESS YES display will show:-



The Enter LED is now flashing asking you to enter a four digit number.

Choose from:-

1st & 2nd Digits	3rd & 4th Digits
Bell On Time (Minutes)	Number of Re-Arms

As an example 2003 would be Bells on for 20 Minutes with 3 Re-Arms

Enter your four digits followed by YES. (A tone will be heard if option is updated).

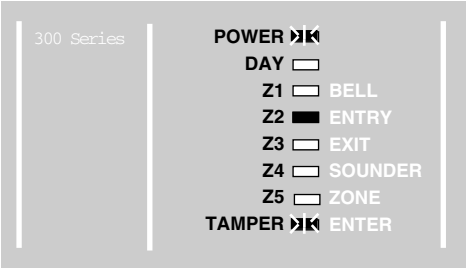
To move onto another option use the NO key.

If you wish to escape out of engineer mode and return to Unset, PRESS 0.

SYSTEM PROGRAMMING (ENTRY TIME OPTION)

With the Control Panel in engineer mode PRESS NO until the POWER & ENTRY LEDs are FLASHING.

PRESS YES the display will show:-



The Enter LED is now flashing asking you to enter a four digit number.

Choose from:-

1st & 2nd Digits	3rd & 4th Digits
Entry Time 1 (Seconds)	Entry Time 2 (Seconds)

As an example 2010 would be 20 seconds Entry Time 1 and 10 seconds Entry Time 2

Enter your four digits followed by YES.(A tone will be heard if option is updated).

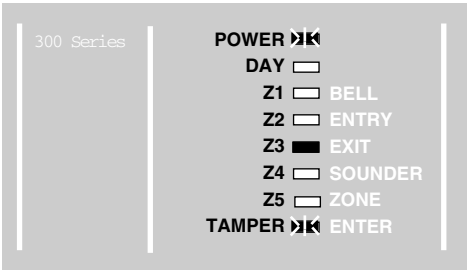
To move onto another option use the NO key.

If you wish to escape out of engineer mode and return to Unset, PRESS 0.

SYSTEM PROGRAMMING (EXIT TIME OPTION)

With the Control Panel in engineer mode PRESS NO until the POWER & EXIT LEDs are FLASHING.

Press YES display will show:-



The Enter LED is now flashing asking you to enter a four digit number.

Choose from:-

1st & 2nd Digits	3rd & 4th Digits
Full Set Exit Time (Seconds)	Part Set Exit Time (Seconds)

As an example 2010 would be 20 seconds Full Set Exit Time & 10 seconds Part Set Exit Time.

Enter your four digits followed by YES.(A tone will be heard if option is updated).

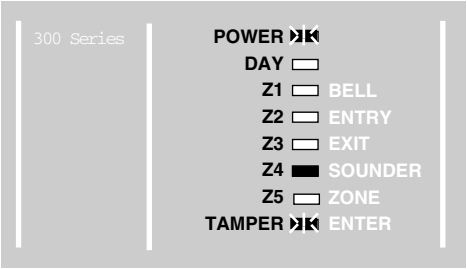
To move to another option use the NO key.

If you wish to escape out of engineer mode and return to Unset, PRESS 0.

SYSTEM PROGRAMMING (SOUNDER OPTION)

With the Control Panel in engineer mode PRESS NO until the POWER & SOUNDER LEDs are FLASHING.

PRESS YES display will show:-



The Enter LED is now flashing asking you to enter a four digit number.

Choose from:-

1st Digit Chime Volume	2nd Digit Entry/Exit Volume	3rd Digit Setting Sounders	4th Digit Programmable Terminal
0 - 9	0 - 9	0=All Parts silent 1=Part 2 silent 2=Parts 1&3 silent 3=All parts audible	0 = Pulse On 1 = Sw+ when set 2 = Pulse Off 3 = On with Bell 4 = On with Strobe 5 = On in En/Ex 6 = On in Test 7 = On in Int/Alarm

Note: The Chime and E/E volume adjustment is extended through the use of the onboard potentiometer on the Gardtec *350+.*

As an example 5501 would give a volume level of 5 for both Entry/Exit and Chime volume, all part sets silent and the programmable terminal will pulse Off during the setting period.

Enter your four digits followed by YES. (A tone will be heard if option is updated).

To move to another option use the NO key.

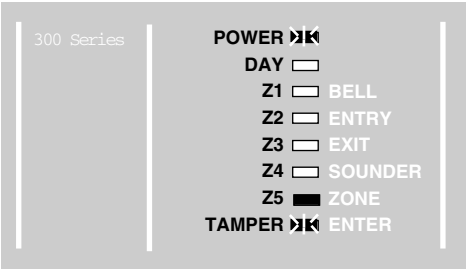
If you wish to escape out of engineer mode and return to Unset, PRESS 0.

SYSTEM PROGRAMMING (ZONE OPTION)

NOTE: You will need to repeat this procedure for each zone you wish to change.

With the Control Panel in engineer mode PRESS NO until the POWER & ZONE LEDs are FLASHING.

PRESS YES display will show:-



The Enter LED is now flashing asking you to enter a four digit number.

Choose from:-

1st Digit Not Used	2nd Digit Zone Number	3rd Digit Zone Type	4th Digit Zone Control
Always 0	1 - 5	0 = 12 Hour 1 = Entry/Exit 2 = Access 3 = Panic 4 = 24 Hour 5 = Fire 6 = Alert 8 = Part Entry/Exit	0=Full Set 1=Part1 Removed 2=Part2 Removed 3=Part1&2 Rem. 4=Full Set+ Chime 5=Part1 + Chime 6=Part2 + Chime 7=Part1&2+Chime

N.B. The terminology used for zone types is given on page 27

As an example 0315 would make zone 3 an Entry/Exit zone that is removed when the system is part 1 set and is on Chime when the system is unset.

Enter your four digits followed by YES. (A tone will be heard if option is updated).

To move onto another option use the NO key.

If you wish to escape out of engineer mode and return to Unset, PRESS 0.

ENGINEER/USER PROGRAMMING OVERVIEW

This mode allows options shown in White on the Control panel label to be programmed. To enter the Engineer/User Programming Mode proceed as follows:-

With the Control Panel Unset (POWER & DAY LED illuminated) enter the engineer code (1234 factory default).

The Control Panel will start to set.

Press **NO** before the exit time expires (the POWER and DAY LEDs will extinguish and the REMOVE LED will flash). This is Engineer/User Programming Mode. The function of the LEDs should now be read from the White legend on the affixed keypad sticker.

To go direct to a particular function Press NO until the required LED is flashing

If at any time during Exit time the code is re-entered the Panel will return to DAY (Unset) Mode.

REMOVING ZONES

With the panel in Engineer/User Programming Mode Press NO until the REMOVE LED is flashing, Press YES. The REMOVE LED will illuminate steadily.

NOTE: This function is in addition to Part Sets.

Enter the required zone number followed by YES to Remove or NO to "Un-Remove". A comfort tone will be generated. **You must repeat this for each zone you wish to REMOVE.**

If you wish to escape from the Engineer/User Programming mode and set the panel with the Zone(s) removed Press 0.

TESTING THE SYSTEM

With the panel in Engineer/User Programming Mode Press NO until the TEST LED is flashing, Press YES. The TEST LED will illuminate steadily. Any Zone activated will now produce a tone and the appropriate zone LED will illuminate. Pressing 9 whilst in this mode will toggle the external sounder / strobe On and Off.

To escape out of Test Mode, Press 0

Then Press NO to move to the next option, or Press 0 if you wish to escape out of Engineer/User Mode

READING THE LOG

With the panel in Engineer/User Programming Mode Press NO until the LOG LED is flashing, Press YES. The last event will be displayed.

Press NO to read the previous event (move back)

Press YES to read the next event (move forward)

To escape out of Log Mode Press 0

Then Press NO to move to the next option, or Press 0 if you wish to escape out of Engineer/User Mode

SETTING CHIME ON/OFF

With the panel in Engineer/User Programming Mode Press NO until the CHIME LED is flashing, Press YES if you wish to reverse the chime status.The CHIME LED will illuminate steadily and the enter LED will flash.

Pressing YES again will escape the Chime mode

Note: Chime zones should also be programmed from Engineer Mode.

Then Press NO to move to the next option, or Press 0 if you wish to escape out of Engineer/User Mode.

PROGRAMMING ENGINEER CODE

With the panel in Engineer/User Programming Mode Press NO until the PROGRAM LED is flashing, Press YES. The PROGRAM LED will illuminate steadily. The ENTER LED will flash.

Enter a new four digit Engineer code

Press YES. The PROGRAM LED will stay illuminated and the ENTER LED will flash (asking you to confirm the new code)

Re-enter the new four digit Engineer code.

Press YES. A comfort tone will be generated if codes match.

If NO is pressed at any stage during the above, or if the procedure is not followed cor-

rectly, then the code will not be updated and no comfort tone will be generated.

Pressing NO will now move to the next option or Press 0 if you wish to escape out of Engineer/User Programming Mode.

TO FULL SET THE SYSTEM (USING ENGINEER CODE)

The System may be set using the Engineer Code. It should however be noted that the System may only be Unset using the Engineer code if it has been Set with the Engineer code.

With the Control Panel Unset (POWER & DAY LEDs On) proceed as follows:-

Enter the Engineer code, the day LED will flash then exit tone will sound (if you wish to abort setting the system re-enter code).

Leave the building via the authorised exit route (any zones activated during Exit will cause a change in tone to the Exit tone. The activated zone will also be displayed via the relevant LED).

After the programmed Exit time the Panel will Set.

TO PART SET THE SYSTEM (USING ENGINEER CODE)

To Partset the system using the Engineer code proceed as follows:-

Enter the Engineer code. The day LED will flash then exit tone will sound (if you wish to abort setting the system re-enter code)

Press 1 if Partset 1 is required (Zones programmed into Part 1 will be removed) **or**

Press 2 if Partset 2 is required (Zones programmed into Part 2 will be removed) **or**

Press 3 if Partset 3 is required (Zones programmed into both Part 1 and Part 2 will be removed)

It should be noted if part set 1, 2 or 3 has been selected the day LED will flash at a slower rate. Also if the silent part set option has been programmed, the exit tone will be silenced.

Leave the premises or retire to an authorised area. After the programmed exit time the System will Set. If the silent Partset has been chosen the Setting will be confirmed with a single beep at the end of the Exit time. If detectors are still in fault at the end of the exit time a fault tone will be generated. If a fault is present the control panel will not set.

TO UNSET THE SYSTEM (USING ENGINEER CODE)

It should be noted that the System may only be Unset using the Engineer code if it has previously been Set using the Engineer code. To Unset the System proceed as follows:-

Enter the premises via the authorised Entry point. The Entry tone will sound (Entry Time1).

If the panel is not unset during Entry Time 1, the tone will increase in volume and pace (this is Entry Time 2).

Proceed directly to the Control Panel and Enter the Engineer code, the day LED will illuminate

The system is now Unset.

If the panel was not unset before Entry Time 2 expired a full alarm condition will occur.

If the alarm was activated whilst the system was set all the LEDs will flash when the system is unset. Press NO to view the cause of the alarm. The system will now need to be reset (as shown below).

RESETTING AFTER AN ALARM

If the system is set, unset it as shown above and proceed as follows:-

After an alarm all the LEDs will be flashing, press NO if you wish to view the cause of alarm.

Enter the engineer or master user code, the system will start to set.

Before the entry time expires re-enter the code to abort the setting. The system is now reset.

FACTORY DEFAULTS

If the engineer or master user codes have been forgotten temporary access may be gained by removing LK1 from the main P.C.B. The factory set codes (1234 engineer or 5678 master) may then be used to gain access to the desired function. **It should be noted that LK1 MUST be replaced before any option can be re-programmed.**

FACTORY DEFAULTS (cont)

To revert to Factory Defaults :-

1) Power the panel up and press 00 within 5 seconds

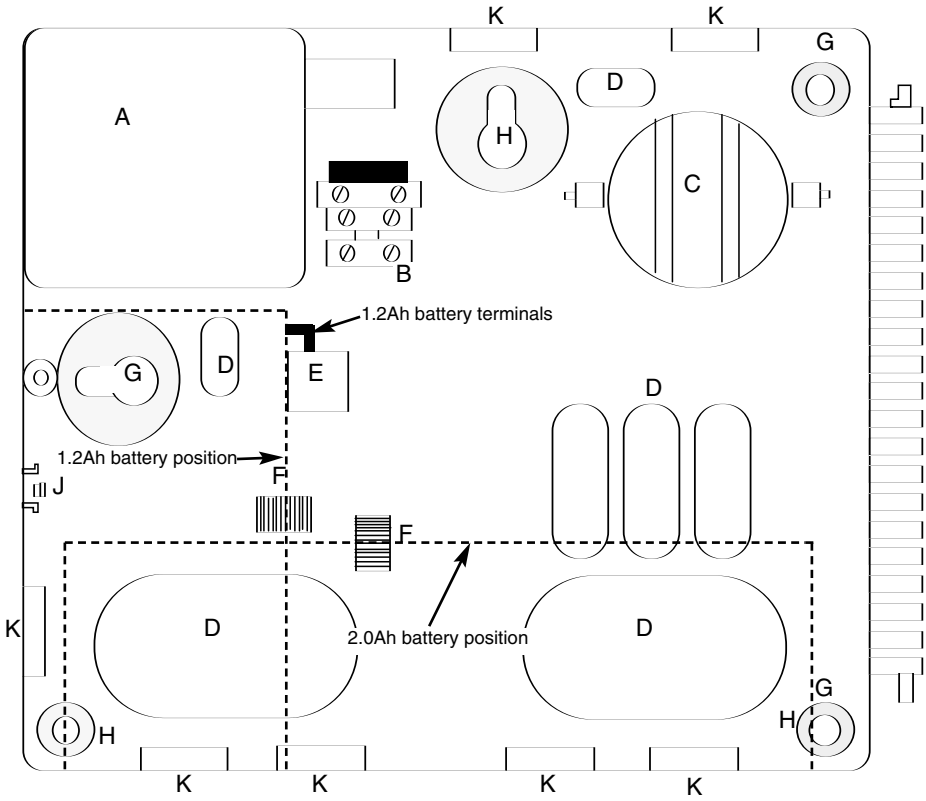
2) Remove all power from the Control Panel. Leave power off for at least 10 seconds.

3) Re-apply the power to the Control Panel and Press 4, 6, YES, NO within 5 seconds.

FUNCTION	OPTIONS AVAILABLE	DEFAULT
Zone 1	**3rd DIGIT ZONE TYPE** 0=12Hr 1=Entry/Exit 2=Access 3=Panic 4=24Hr 5=Fire 6=Alert 8=Part Entry/Exit Terminology for zone types shown on page 27 **4th DIGIT ATTRIBUTES** 0=Full set 1=Pt1 Rem 2=Pt2 Rem 3=Pt1&2 Rem 4=Full set+chime 5=Pt1+chime 6=Pt2+chime 7=Pt1&2+chime	14
Zone 2	" " " " "	80
Zone 3	" " " " "	00
Zone 4	" " " " "	01
Zone 5	" " " " "	02
Chime Level	0 - 9	5
Entry/Exit Level	0 - 9	5
Part set Sounders	0=All parts silent 1=Part2 silent 2=Parts1&3 silent 3=All Parts Audible	3
Entry Time1	0 - 99 seconds	30
Entry Time 2	0 - 99 seconds	10
Full set Exit Time	0 - 99 seconds	30
Part set Exit Time	0 - 99 seconds	30
Bell On Time	0 - 99 minutes	20
Bell Re-arms	0 - 99	99
Programmable Output	0= Pulse On 1= Sw+ when set 2= Pulse Off 3= On with Bell 4= On with Strobe 5= On in E/E 6= On in Test 7= On with Internal Alarm	2
Engineer Code	Any Four Digits	1234
Master Code	Any Four Digits	5678

350 CONTROL PANEL FIXING

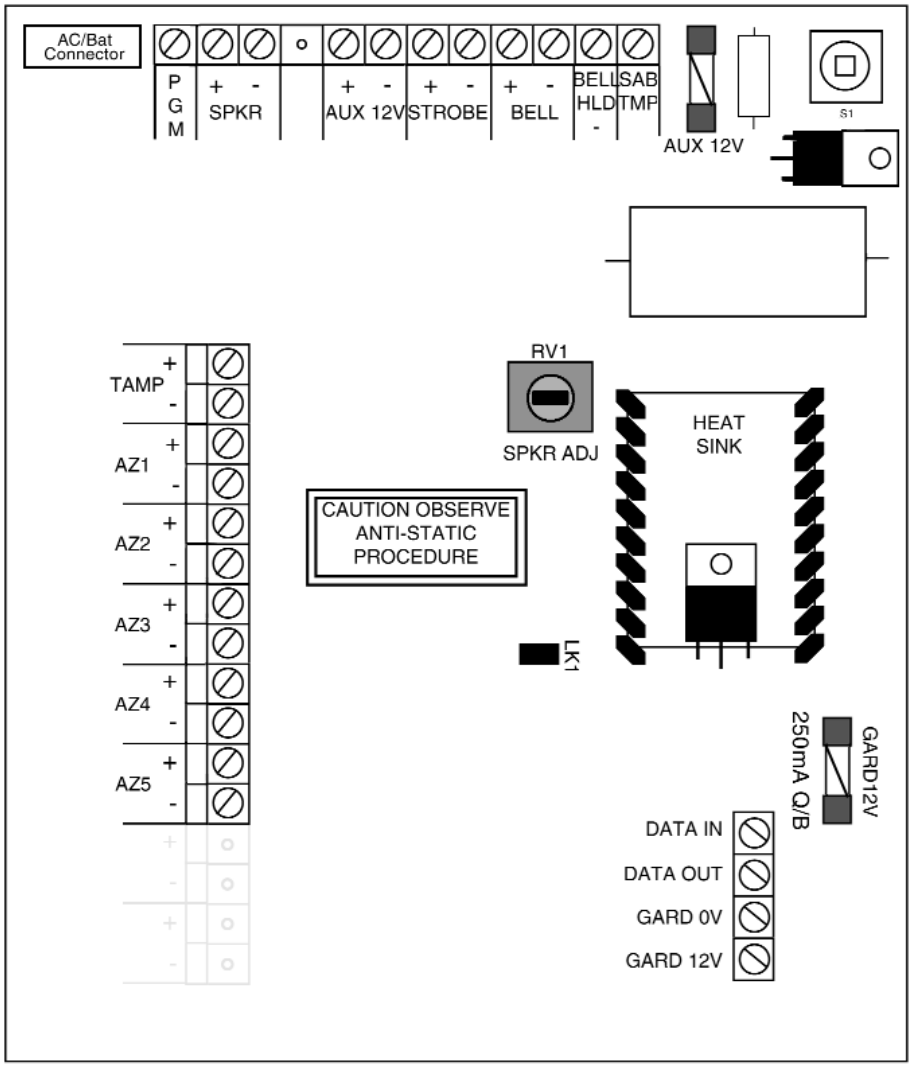
The Gardtec 350 Control Panel may be fixed in a horizontal or vertical position. The software will allow the orientation of the keypad to be changed a vertical keypad sticker is available as an optional extra. The Control panel should be fixed to the wall using one hanger position and two fixing points. The backplate should be used as a template for marking the wall. **Under no circumstances should you drill through the back-plate.** Screw size should be No.8 x 30mm (minimum). Details of the Gardtec 350 back-plate can be seen in the diagram below.



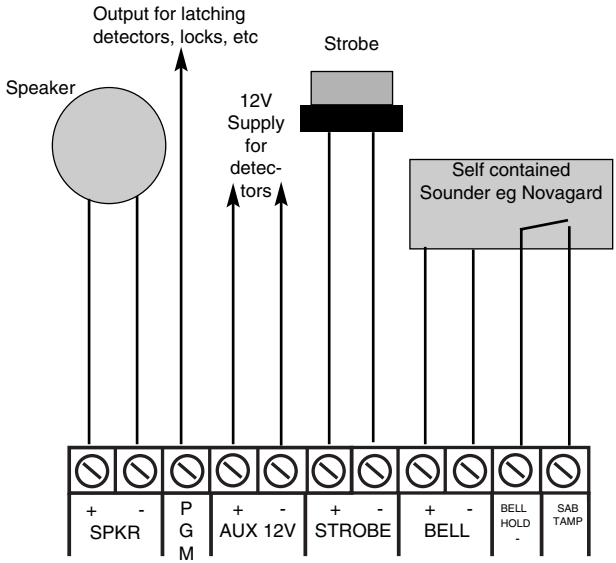
A	Transformer	F	Battery Retaining Clips
B	Mains Connector Block	G	Vertical Fixing Points
C	Speaker Position	H	Horizontal Fixing Points
D	Cable Entries	J	Spare Fuse Holder
E	Rear Tamper Switch Position	K	Trunking Entries

PRINTED CIRCUIT BOARD LAYOUT

RV1 Used to obtain further adjustment to the volume of the low volume tones from the speaker.



OUTPUT CONNECTIONS



NOTE:

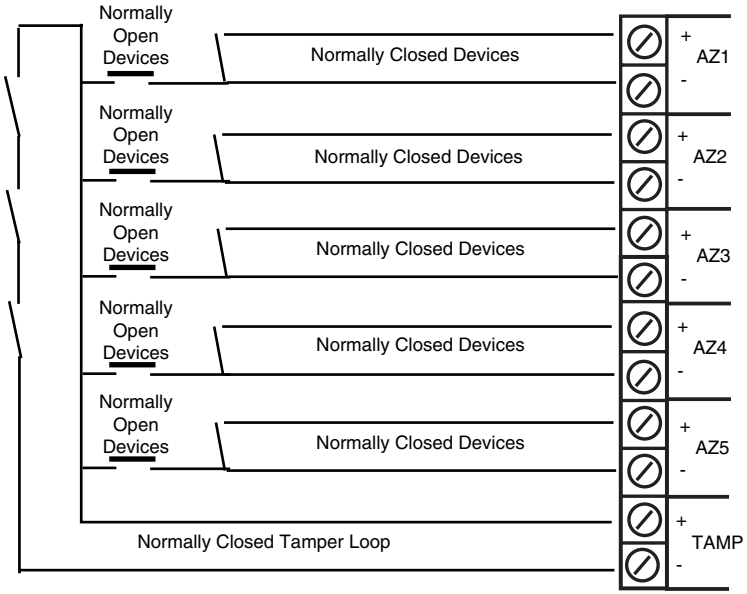
The Gardtec *350* has 0.8 Amp available to supply detectors, Sounders, Strobes etc. When planning your system you **MUST** make sure that this is not exceeded.

Damage caused through overloading the Gardtec *350* may not be covered by the warranty.

The PGM terminal is open collector output held high trough an integral 1k pull-up resistor. The maximum sink capability of this terminal is 50mA.

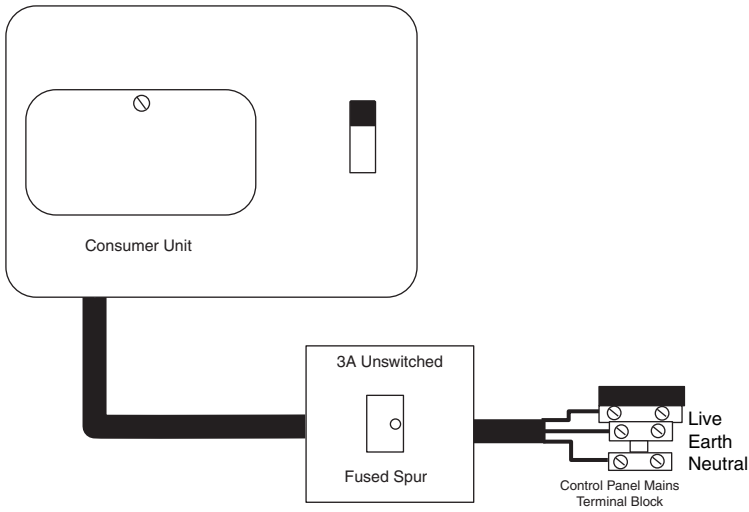
N.B. The 350+ has an additional supply capability of 0.2A through TB3.

INPUT CONNECTIONS



MAINS CONNECTION

It should be noted that in order to comply with the requirements of B.S 4737 an unswitched fused spur should be fitted outside the Control panel. Details of this connection can be seen below.



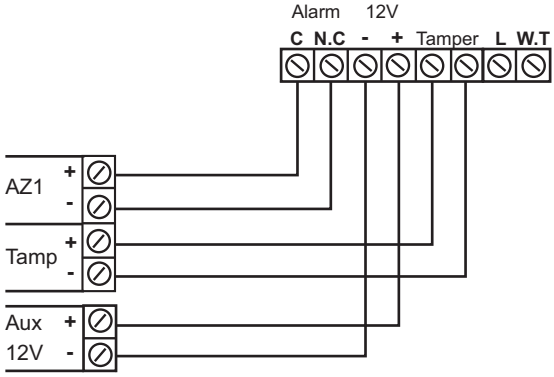
Connections:

Live = Red (or Brown)
Earth = Green/Yellow
Neutral = Black (or Blue)

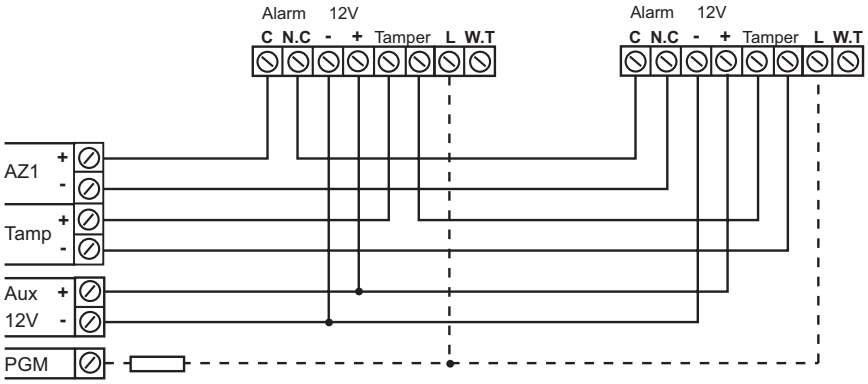
DETECTOR WIRING

Below is a typical example of wiring a Gardscan 212 PIR to the Gardtec *350* Control panel. The wiring of a Shockgard vibration detector would be the same with the W.T terminal omitted

Single Detector Per Zone



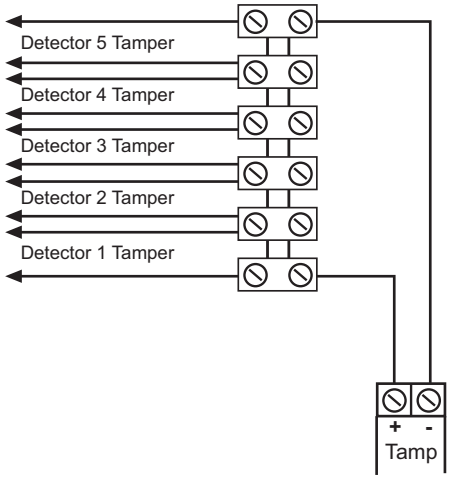
Double Detector Per Zone



Note: The dotted line shown is for the latch signal from the Control panel and is used for Any Detector on the line to indicate (omit the resistor shown) after an alarm or First Detector on the line to indicate (include the resistor shown) after an alarm. If no individual indication is required both resistor and latch signal line may be omitted.
Note: PGM should be programmed for SW+ (this is the factory default setting)
Note: Resistors used for the latch function are supplied with the Detectors.

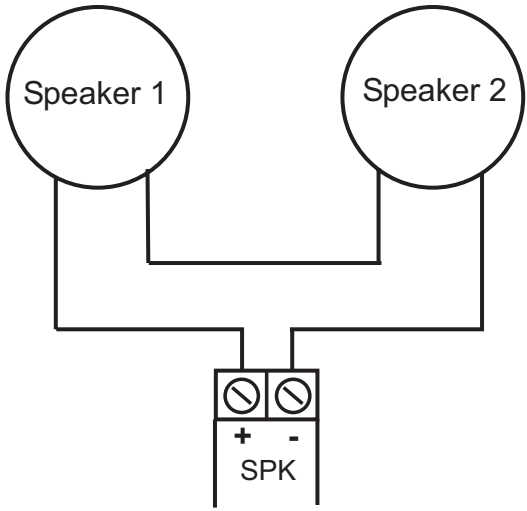
TAMPER WIRING

The Gardtec *350* has two tamper loops available, the first being the Bell tamper situated near the output terminals (labelled BELL HOLD- and SAB TAMP). The second is the Zone tamper and is situated at the end of the zone terminals. All zone tampers should be in series format. This may be easier if the "splitting" of the tampers is in the Control panel. An example of this is given below using connector block strip.



SPEAKER WIRING

One speaker is fitted to the Gardtec *350* as standard. One extra 16 speaker may be fitted if required, this speaker should be wired in series with the existing speaker as shown below.

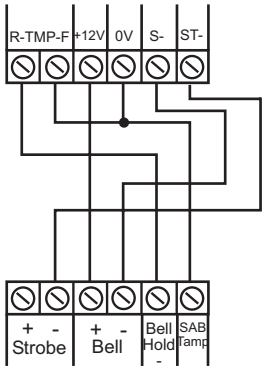


SELF ACTUATING SOUNDER WIRING

Below is shown a typical wiring example of the Novagard 1E Self Actuating Sounder and the Novagard 2 range of Self Actuating Sounders.

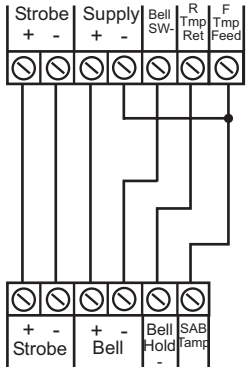
It should be noted in both cases that when the Nicad battery is connected the sounder will sound until the power from the Control panel is applied and the sounder cover is in place.

Novagard 1E



Gardtec *350*

Novagard 2 Range

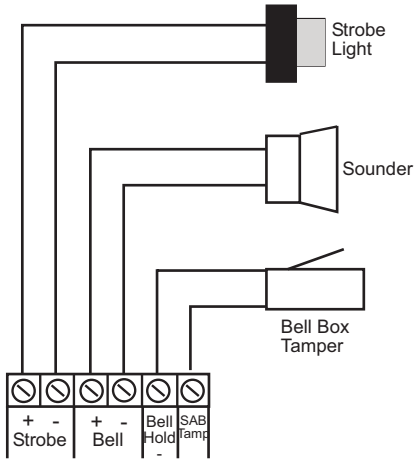


The order shown for the sounder terminals may change dependent on model used.

Gardtec *350*

CONVENTIONAL BELL BOX WIRING

Conventional type Bell Boxes should be wired as shown below. Care should be taken not to exceed the current rating of the Control panel when more than one sounder is used.



Once the system has been commissioned and the final checks have been carried out the zone label (supplied with the Control panel) may be completed and adhered to the inside of the front cover next to the main PCB.

FAULT FINDER

FAULT	ACTION
Control Panel will not power up from mains supply.	Check/Replace fuse in fused spur/mains connection block. Also check for trapped wiring insulation.
Display shows a zone fault and Panel will not set after exit time has expired.	Remove zone wires from the problem zone at Control Panel and replace with a link. Check if panel now sets. If all is O.K check with a multimeter continuity of the wires you have removed. Also check that there is no short circuit between the zone and tamper loop or the zone and 0V.
Control Panel gives a tamper fault .	Link out the tamper loop that is displaying the fault and recheck. If all is O.K test continuity of the faulty loop. Also check for short circuits to other cores of the cable.
Tripping a detector does not cause an alarm and is not registered at the Control Panel.	Check for short circuits on the problem zone. If two detectors are fitted to the same zone try tripping them both at the same time to determine whether they are wired in series.
External sounder does not sound.	Use a multimeter or small buzzer across the Bell + & - terminals to determine if the Control Panel is firing the Bell. If all is O.K check the operation of the sounder by removing the wiring at the sounder and connecting the Nicad battery.
External sounder rings without the Control Panel triggering it.	Disconnect the Nicad battery from the SAB of the sounder. Check to see if the hold off voltage from the Control Panel is present at the SAB, if not check/replace Control Panel fuse. If fuse is O.K check hold off voltage at Control Panel with wiring removed. If hold off voltage O.K check replace wiring/SAB.

FAULT	ACTION
Tamper is not tripped when detector cover is removed.	Check that the tampers are in series. If all is O.K check for short circuits. Remember short circuits are easily caused through staples piercing cables.
Detectors false alarm.	Check that the position of the detector is in accordance with the manufacturers recommendations. In the case of a P.I.R ensure that the unit is not facing a window or situated in a draughty location In the case of a shock sensor ensure that it is not bridging any joints. In the case of a contact check the gap and that there is no excessive movement of the protected item. Check also that low voltage alarm cables do not run parallel to mains cables. Where they do so they should be at least 9 inches apart, when crossing they should do so at 90Þ
Control Panel shows Lid Tamper when cover is in place.	Check the tamper spring is attached to the tamper switch on the PCB module.
Control Panel parameters are unchanged after programming.	Check that LK1 is in place on the PCB.
User and or Engineer code have been forgotten.	Access may be gained to the system by removing LK1 and using factory default codes (replace LK1 after access has been gained). The system may be reverted to factory defaults as shown on pages 13 & 14

ZONE TYPE TERMINOLOGY

The terminology used for the various zone types are explained in this section.

12 Hour	Zone active when Control Panel is Set
Access	Will allow to pass through on Exit. Will allow to pass through on entry only if entry/exit is opened first
24 Hour	Internal sounder if Unset. Full alarm if Set.
Entry/Exit	Zone used as last exit point Will start entry time when opened if panel is Set
Part E/E	As Access if Control Panel is Full Set As entry/exit if Control Panel is Part Set
P.A	24 Hour Personal Attack. Active if Control Panel is Set or Unset
Alert	Internal sounder only Recorded to Log
Fire	Will give Fire alarm when activated (pulsed sounders) with panel set or unset.

USER CODES & TYPES

User	350 Code Type	350+ Code Type
User 1	Master	Master
User 2	User	User
User 3	Set Only	Set Only
User 4	N/A	Master
User 5	N/A	Master
User 6	N/A	User
User 7	N/A	User
User 8	N/A	User
User 9	N/A	Set Only

For further details about user codes please refer to the user manual

GARDTEC *350* SPECIFICATION

Power Input	240V a.c +/- 10% @50Hz
Max Loop Resistance	2K
Loop Delay Time	300 milliseconds
Fuses	
Mains	125mA Anti-Surge
Aux	800mA Quick Blow
Gard (*350 +* only)	250mA Quick Blow
Battery Fuse - Lead	2A Anti-Surge
Low Voltage Output	13.8V (typical) Regulated
Quiescent Current	50mA
Current Rating	1A 350+ (800mA 350)
Battery Sizes	12V 1.2A, 12V 2.0A
Construction	3mm Polycarbonate
Mounting Positions	Horizontal or Vertical
Complies with	B.S 4737 Part 1
Number of Zones	5 + Tamper
Display Type	LED
User Code Default	5678
Engineer Code Default	1234
Event Log Size	50
Number of User Codes	3

ADDITIONAL GARDTEC *350+* FEATURES

Nine user codes.

Keypad backlight.

Onboard potentiometer for further adjustment of low volume tones.

Log size increased to 80 events.

Data ports for connection of expansion devices eg. Remote Keypads.

Additional fuse protection.

GARDTEC *350* SYSTEM RECORD

Customer Name	**Customer Address**
Customer Tel No.	
Customer Ref.	
Installation Date	
Service Due Dates	**Engineers sig.**

Zone No. & Type	Location	Part 1 Set	Part 2 Set	Chime Status	Resistance
Zone 1					
Zone 2					
Zone 3					
Zone 4					
Zone 5					
Tamper					

Bell On Time	**Number of Bell Re-Arms**	**Entry Time 1**	**Entry Time 2**
Full Set Exit Time	**Part Set Exit Time**	**Chime Volume**	**E/E volume**
Setting Sounders		**Programmable Terminal**	

This record should be completed by the engineer at the time of installation and stored in a safe place for future reference.

Notes

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Notes

GardTec
RISCO GROUP

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RISCO Group UK Ltd reserve the right to amend the software and features without prior notice

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